AMENDMENTS TO THE CLAIMS

Listing Of Claims

Claims 1-33 (Canceled)

34. (currently amended) A method for fabricating an interconnect for electrically engaging a semiconductor component ~~with~~ having at least one bumped contact ~~having a radius~~ comprising:

providing a substrate having a first surface and a second surface;

forming a plurality of leads on the first surface configured to electrically engage and support the bumped contact, the leads having terminal portions and support portions connected by a connecting segment;

forming a recess in the first surface at least partially encircled by the connecting segment configured to support and cantilever the terminal portions over the recess ~~with the support portions on the surface supporting the terminal portions~~ for movement within the recess during electrical engagement of the bumped contact;

forming an opening through the connecting segment and the substrate to the second surface;

depositing a conductive material in the opening; and

forming a contact on the second surface in electrical communication with the conductive material.

~~and~~

~~shaping the terminal portions with a curvature approximately equal to the radius of the bumped contact.~~

35. (previously presented) The method of claim 34 further comprising forming outer layers on the terminal portions configured to provide a non bonding surface for the bumped contact.

36. (withdrawn) The method of claim 34 wherein forming the plurality of leads comprises attaching a polymer tape to the substrate with the leads formed thereon.

37. (withdrawn) The method of claim 34 wherein forming the plurality of leads comprises etching beams in the substrate within the recess and covering the beams with conductive layers.

38. (currently amended) The method of claim 34 wherein the substrate comprises a semiconductor material and further comprising forming an insulating layer in the opening prior to the depositing the conductive material step.

~~the forming the recess step comprises etching.~~

39. (currently amended) A method for fabricating an interconnect for electrically engaging a semiconductor component having at least one bumped contact ~~having a shape~~ comprising:

providing a semiconductor substrate having a first surface and a second surface;

forming a plurality of leads on the ~~substrate~~ first surface configured to electrically engage and support the bumped contact, the leads having terminal portions and support portions connected by a connecting segment;

~~, each terminal portion having at least one projection configured to penetrate the bumped contact;~~

forming a recess in the first surface at least partially encircled by the connecting segment configured to cantilever the terminal portions over the recess ~~with the support portions on the surface supporting the terminal portions~~ for movement within the recess during electrical engagement of the bumped contact;

forming an opening through the connecting segment and the substrate to the second surface;

forming an insulating layer in the opening; and

depositing a conductive material in the opening.

~~and~~

~~shaping the terminal portions with a curvature matching the shape of the bumped contact.~~

40. (currently amended) The method of claim 39 further comprising shaping the terminal portions with a curvature matching a shape of the bumped contact.

~~wherein the shaping step comprises pressing the leads with a tool.~~

41. (currently amended) The method of claim 39 further comprising forming a contact on the second surface in electrical communication with the conductive material.

~~wherein the shaping step comprises heating the leads.~~

42. (withdrawn) The method of claim 39 further comprising shaping the leads with a radius of curvature corresponding to a diameter of the bumped contact.

43. (currently amended) The method of claim 39 further comprising forming a second insulating layer in the recess.

~~a connecting segment on the substrate electrically connecting the leads, a conductive via in the substrate in electrical communication with the connecting segment and a contact on the substrate in electrical communication with the conductive via.~~

Claims 44-48 (canceled)

49. (currently amended) A method for fabricating an interconnect for electrically engaging a semiconductor component having a plurality of bumped contacts comprising:

providing a substrate having a first surface and a second surface;

forming a plurality of interconnect contacts on the ~~substrate~~ first surface configured to electrically engage the bumped contacts, each interconnect contact comprising a plurality of leads having terminal portions and a connecting segment on the first surface connecting the leads;

~~projections on the terminal portions configured to penetrate oxide layers on the bumped contacts;~~

forming outer layers on the terminal portions ~~and projections~~ configured to provide non-bonding surfaces for the bumped contacts;

forming a plurality of recesses in the ~~substrate proximate to the leads~~ first surface, each recess at least partially encircled by a connecting segment, the recesses configured to cantilever the terminal portions of the leads for movement within the recesses during ~~the~~ electrical engagement of the bumped contacts;

forming a plurality of conductive vias in the connecting segments and in the substrate from the first surface to the second surface; and

forming a plurality of contacts on the second surface in electrical communication with the conductive vias.

~~and~~

~~shaping the terminal portions to match a shape of a bumped contact.~~

50. (currently amended) The method of claim 49 wherein the forming the conductive vias step comprises forming an opening through each connecting segment and depositing a conductive material in the opening.

~~outer layers comprise a conductive polymer.~~

51. (currently amended) The method of claim 49 further comprising forming projections on the leads prior to the forming the outer layers step.
~~projections comprise blades.~~

52. (withdrawn) The method of claim 49 wherein the forming the conductive vias step comprises laser machining.

Claims 53-58 (canceled)